HISTORY, CIVICS AND GEOGRAPHY (50)

GEOGRAPHY

H.C.G. - Paper - 2

Aims:

1. To develop an understanding of terms, concepts and principles related to Geography.
2. To explain the cause- effect relationships of natural phenomena.
3. To understand the use of natural resources and development of regions.
4. To acquire knowledge of and appreciate the interdependence of nations and different regions of the world.
5. To know the availability of resources, understand, explain their uses and appreciate the problems of development in India.
6. To understand and encourage human efforts made to conserve and protect the natural environment.
7. To acquire practical skills related to the meaning and use of maps and their importance in the study of Geography.

CLASS IX

There will be one paper of two hours duration carrying 80 marks and Internal Assessment of 20 marks.

The question paper will consist of Part I and Part II.

***Part I (compulsory)** will consist of **two** questions. Question 1 will consist of short answer questions from the entire syllabus and Question 2 will consist of a question based on World **Map**.*

***Part II**. Candidates will be required to choose **any five** questions.*

Candidates will be expected to make the fullest use of sketches, diagrams, graphs and charts in their answers.

Questions may require answers involving the interpretation of photographs of geographical interest.

PRINCIPLES OF GEOGRAPHY

1. Our World

(i) Earth as a planet

Shape of the earth. Earth as the home of humankind and the conditions that exist.

(ii) Geographic grid - Latitudes & Longitudes

(a) *Concept of latitudes: main latitudes, their location with degrees, parallels of latitude and their uses. (b) Concept of longitudes - Prime Meridian, time (local, standard and time zones, Greenwich Mean Time (GMT) and International Date Line (IDL). Eastern and Western hemisphere. (c) Using latitudes and longitudes to find location. Calculation of time. (d) Great Circles and their use.*

(iii) Rotation and Revolution

Rotation – direction, speed and its effects (occurrence of day and night, the sun rising in the east and setting in the west, Coriolis effect)

Revolution of the earth and its inclined axis – effects: the variation in the length of the day and night and seasonal changes with Equinoxes and Solstices.

2. Structure of the Earth

(i) Earth's Structure

Core, mantle, crust – meaning, extent and their composition.

(ii) Landforms of the Earth

Mountains, plateaus, plains (definition, types and their formation):

Mountains – fold, residual and block.

Plateaus – intermont and volcanic.

Plains – structural and depositional.

Examples from the world and India.

(iii) Rocks - difference between minerals and rocks, types of rocks: igneous, sedimentary, metamorphic, their characteristics and formation; rock cycle.

(iv) Volcanoes

Meaning, Types – active, dormant and extinct.

Effects – constructive and destructive.

Important volcanic zones of the world.

(v) Earthquakes

Meaning, causes and measurement.

Effects: destructive and constructive.

Earthquake zones of the World

(vi) Weathering and Denudation

Meaning, types and effects of weathering.

Types: Physical Weathering – block and granular disintegration, exfoliation;

Chemical Weathering–oxidation, carbonation, hydration and solution;

Biological Weathering – caused by humans, plants and animals.

Meaning and agents of denudation; work of river and wind.

Stages of a river course and associated land forms – V-shaped valley, waterfall, meander and delta.

Wind – deflation hollows and Sand dunes.

3. Hydrosphere

Meaning of hydrosphere.

Tides - formation and pattern.

Ocean Currents – their circulation pattern and effects. (Specifically of Gulf Stream, North Atlantic Drift, Labrador Current, Kuro Shio and Oya Shio.)

4. Atmosphere

(i) Composition and structure of the atmosphere.

Troposphere, Stratosphere, Ionosphere and Exosphere; Ozone in the Stratosphere, its depletion. Global warming and its impact.

(ii) Insolation

- *Meaning of insolation and terrestrial radiation.*
- *Factors affecting temperature: latitude, altitude, distance from the sea, slope of land, winds and ocean currents.*

(iii) Atmospheric Pressure and Winds.

- *Meaning and factors that affect atmospheric pressure.*
- *Major pressure belts of the world.*
- *Factors affecting direction and velocity of wind – pressure gradient, Coriolis Effect.*
- *Permanent winds – Trades, Westerlies and Polar Easterlies.*
- *Periodic winds - Land and Sea breezes, Monsoons.*
- *Local winds - Loo, Chinook, Foehn and Mistral.*
- *Variable winds - Cyclones and Anticyclones.*
- *Jet Streams- Meaning and importance.*

(v) Humidity

- *Humidity – meaning and difference between relative and absolute humidity.*
- *Condensation – forms (clouds, dew, frost, fog and mist).*
- *Precipitation - forms (rain, snow, and hail).*
- *Types of rainfall – relief/orographic, convectional, cyclonic/ frontal with examples from the different parts of the world.*

5. Pollution

(a) Types - air, water (fresh and marine), soil, radiation and noise.

(b) **Sources**

- *Noise: Traffic, factories, construction sites, loud speakers, airports.*
- *Air: vehicular, industrial, burning of garbage.*
  Water: domestic and industrial waste.
- *Soil: chemical fertilizers, bio medical waste and pesticides.*
- *Radiation: X- rays; radioactive fallout from nuclear plants.*

(c) Effects - on the environment and human health.

(d) Preventive Measures

Car pools, promotion of public transport, no smoking zone, restricted use of fossil fuels, saving energy and encouragement of organic farming.

6. Natural Regions of the World

Location, area, climate, natural vegetation and human adaptation.

Equatorial region, Tropical grasslands, Tropical Deserts, Tropical Monsoon, Mediterranean, Temperate grasslands, Taiga and Tundra.

7. Map Work

On an outline map of the World, candidates will be required to locate, mark and name the following:

1. *The major **Natural Regions** of the world - Equatorial, Tropical Monsoon, Tropical Deserts, Mediterranean type, Tropical grasslands, Temperate grasslands, Taiga and Tundra.*
2. *The Oceans, Seas, Gulfs and Straits - all Major Oceans, Caribbean Sea, North Sea, Black Sea, Caspian Sea, South China Sea, Mediterranean Sea, Gulf of Carpentaria, Hudson Bay, Persian Gulf, Gulf of Mexico, Gulf of Guinea, Bering Strait, Strait of Gibraltar, Strait of Malacca.*
3. *Rivers – Mississippi, Colorado, Amazon, Paraguay, Nile, Zaire, Niger, Zambezi, Orange, Rhine, Volga, Danube, Murray, Darling, Hwang Ho, Yangtse Kiang, Ob, Indus, Ganga, Mekong, Irrawaddy, Tigris, Euphrates.*
4. *Mountains – Rockies, Andes, Appalachian, Alps, Himalayas, Pyrenees, Scandinavian Highlands, Caucasus, Atlas, Drakensburg, Khinghan, Zagros, Urals, Great Dividing Range.*
5. *Plateaus – Canadian Shield, Tibetan Plateau, Brazilian Highlands, Patagonian Plateau, Iranian Plateau, Mongolian Plateau.*

INTERNAL ASSESSMENT

PRACTICAL WORK/ PROJECT WORK

1. A record file having any **three** of the following exercises will be maintained. (The file will be evaluated out of 10 marks).
   (a) Uses of important types of maps.
   (b) Directions and how to identify them - an illustrative diagram.
   (c) Reading and using statement of scale, graphic scale and scale shown by representative fraction method. (No drawing work, only explaining their meanings).
   (d) Reading of one town guide map or an atlas map. (Recognising the symbols and colours used, identifying directions and distances).
   (e) Drawing and recognising forms of important contours viz. valleys, ridges, types of slopes, conical hill, plateau, escarpment and sea cliff.
   (f) Drawing at least one sketch map to organize information about visiting an important place, a zoo or a monument.
2. Candidates will be required to prepare a project report on any **one** topic. The topics for assignments may be selected from the list of suggested assignments given below. Candidates can also take up an assignment of their choice under any of the four broad areas given below. (The project will be evaluated out of 10 marks).

Suggested list of Assignments:

(a) **Weather records:** Maintaining and interpreting weather records as found in the newspaper for at least one season.

(b) **Collection of data from secondary sources** (Using Modern techniques i.e GPS, Remote Sensing, Aerial Photography and Satellite imageries) **:** Preparing a PowerPoint presentation on current issues like – use of earth resources/ development activities/dangers of development and ecological disasters like droughts, earthquakes, volcanoes, floods, landslides cyclones and tornadoes in the world.

(c) Physical Features: Collection of data from primary and secondary sources or taking photographs and preparing notional sketches of features found in the vicinity or areas visited during the year as a part of school activity.

(d) Find out the sources of pollution of water bodies in the locality and determine the quality of water.

(e) Collect information on global environmental issues and problems and communicate your findings through appropriate modes (posters, charts, collages, cartoons, handouts, essays, street plays and PowerPoint presentation).

(f) **Area Studies:** Choosing any aspect from Section B (World Studies) and preparing a PowerPoint presentation or a write up on it.

(g) **Meteorological Instruments and their uses** – Six's maximum and minimum thermometer, mercury barometer, aneroid barometer, wind vane, anemometer, rain gauge and hygrometer**.**

CLASS X

*There will be **one** paper of **two** hours duration carrying 80 marks and Internal Assessment of 20 marks.*

*The Paper will consist of **two** parts, Part I and Part II.*

***Part I** (compulsory) will consist of **two** questions. Question 1 will be based on Topographical **Map**. Question 2 will be based on outline **Map** of India.*

*Part II: Candidates will be expected to answer any **five** questions.*

Candidates will be expected to make the fullest use of sketches, diagrams, graphs and charts in their answers.

Questions set may require answers involving the interpretation of photographs of geographical interest.

PART – I

MAP WORK

1. Interpretation of Topographical Maps

a. *Locating features with the help of a four figure or a six figure grid reference.*

b. *Definition of contour and contour interval. Identification of landforms marked by contours (steep slope, gentle slope, hill, valley, ridge / water divide, escarpment), triangulated height, spot height, bench mark, relative height/ depth.*

c. *Interpretation of colour tints and conventional symbols used on a topographical survey of India map.*

d. *Identification and definition of types of scale given on the map.*

Measuring distances and calculating area using the scale given therein.

e. *Marking directions between different locations, using eight cardinal points.*

f. *Identify: Site of prominent villages and/or towns, types of land use / land cover and means of communication with the help of the index given at the bottom of the sheet.*

g. *Identification of drainage (direction of flow and pattern) and settlement patterns.*

h. *Identification of natural and man-made features.*

2 Map of India

On an outline map of India, candidates will be required to locate, mark and name the following:

***Mountains, Peaks and Plateaus:** Himalayas, Karakoram, Aravali, Vindhyas, Satpura, Western and Eastern Ghats, Nilgiris, Garo, Khasi, Jaintia, Mount Godwin Austin (K2), Mount Kanchenjunga. Deccan Plateau, Chota Nagpur Plateau.*

***Plains:** Gangetic Plains and Coastal plains – (Konkan, Kanara, Malabar, Coromandel, Northern Circars).*

***Desert:** Thar (The Great Indian Desert)*

***Rivers:** Indus, Ravi, Beas, Chenab, Jhelum, Satluj, Ganga, Yamuna, Ghaghra, Gomti, Gandak, Kosi, Chambal, Betwa, Son, Damodar, Brahmaputra, Narmada, Tapti, Mahanadi, Godavari, Krishna, Cauveri, Tungabhadra.*

***Water Bodies :** Gulf of Kutch, Gulf of Khambhat, Gulf of Mannar, Palk Strait, Andaman Sea, Chilka Lake, Wular Lake.*

***Passes:** Karakoram, Nathu-La Passes.*

***Latitude and Longitudes:** Tropic of Cancer, Standard Meridian (82°30'E).*

***Direction of Winds**: South West Monsoons (Arabian Sea and Bay of Bengal Branches), North East Monsoons and Western Disturbances.*

***Distribution of Minerals**: Oil - Mumbai High (Offshore Oil Field) and Digboi. Iron – Singhbhum, Coal – Jharia.*

***Soil Distribution** – Alluvial, Laterite, Black and Red Soil.*

***Cities -** Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Bengaluru, Kochi, Chandigarh, Srinagar, Vishakhapatnam, Allahabad.*

***Population -** Distribution of Population (Dense and sparse).*

PART - II

GEOGRAPHY OF INDIA

3. Location, Extent and Physical features

- *Position and Extent of India. (through Map only)*
- *The physical features of India – mountains, plateaus, plains and rivers. (through Map only)*

4. Climate

Distribution of Temperature, Rainfall, winds in Summer and Winter and factors affecting the climate of the area. Monsoon and its mechanism. Seasons –March to May – Summer; June to September – Monsoon; October to November - Retreating Monsoon. December to February – Winter.

5. Soil Resources

- *Types of soil (alluvial, black, red and laterite) distribution, composition and characteristics such as colour, texture, minerals and crops associated.*
- *Soil Erosion – causes, prevention and conservation.*

6. Natural Vegetation

- *Importance of forests.*
- *Types of vegetation (tropical evergreen, tropical deciduous, tropical desert, littoral and mountain), distribution and correlation with their environment.*
- *Forest conservation.*

7. Water Resources

- *Sources (Surface water and ground water).*
- *Need for conservation and conservation practices (Rain water harvesting and its importance).*
- *Irrigation: Importance and methods.*

8. Mineral and Energy Resources

- *Iron ore, Manganese, Copper, Bauxite – uses and their distribution*
- *Conventional Sources: Coal, Petroleum, Natural gas (distribution, advantages and disadvantages)*
- *Hydel power (Bhakra Nangal Dam and Hirakud).*
- *Non-conventional Sources: Solar, wind, tidal, geo-thermal, nuclear and bio-gas (generation and advantages).*

9. Agriculture

- *Indian Agriculture – importance, problems and reforms.*
- *Types of farming in India: subsistence and commercial: shifting, intensive, extensive, plantation and mixed.*
- *Agricultural seasons (rabi, kharif, zayad).*
- *Climatic conditions, soil requirements, methods of cultivation, processing and distribution of the following crops:*
  - *rice, wheat, millets and pulses.*
  - *sugarcane, oilseeds (groundnut, mustard and soyabean).*
  - *cotton, jute, tea and coffee.*

10. Manufacturing Industries

Importance and classification

- *Agro based Industry - Sugar, Textile (Cotton and Silk).*
- *Mineral based Industry – Iron & Steel (TISCO, Bhilai, Rourkela,Vishakhapatnam) Petro Chemical and Electronics.*

11. Transport

Importance and Modes – Roadways, Railways, Airways and Waterways –- Advantages and disadvantages.

12. Waste Management

- *Impact of waste accumulation - spoilage of landscape, pollution, health hazards, effect on terrestrial, aquatic (fresh water and marine) life.*
- *Need for waste management.*
- *Methods of safe disposal - segregation, dumping and composting.*
- *Need and methods for reducing, reusing and recycling waste.*

INTERNAL ASSESSMENT

PRACTICAL / PROJECT WORK

Candidates will be required to prepare a project report on any **one** topic. The topics for assignments may be selected from the list of suggested assignments given below. Candidates can also take up an assignment of their choice under any of the broad areas given below.

Suggested list of assignments:

1. Local Geography:

(a) Land use pattern in different regions of India– a comparative analysis.

(b) The survey of a local market on the types of shops and services offered.

2. Environment:

Wildlife conservation efforts in India.

3. Current Geographical Issues:

Development of tourism in India.

4. Transport in India**:**

Development of Road, Rail, Water and Air routes.

5. List different type of industries in the States and collect information about the types of raw materials used, modes of their procurement and disposal of wastes generated. Classify these industries as polluting or environment friendly and suggest possible ways of reducing pollution caused by these units.

6. Need for industrialization in India, the latest trends and its impact on economy of India.

7. Visit a water treatment plant, sewage treatment plant or garbage dumping or vermi composting sites in the locality and study their working.

EVALUATION

The assignments/project work is to be evaluated by the subject teacher and by an External Examiner. (The External Examiner may be a teacher nominated by the Head of the school, who could be from the faculty, **but not teaching the subject in the section/class**. For example, a teacher of Geography of Class VIII may be deputed to be an External Examiner for Class X, Geography projects.)

The Internal Examiner and the External Examiner will assess the assignments independently.

Award of Marks (20 Marks)

Subject Teacher (Internal Examiner)	10 marks
External Examiner	10 marks

The total marks obtained out of 20 are to be sent to the Council by the Head of the school.

The Head of the school will be responsible for the entry of marks on the mark sheets provided by the Council.

INTERNAL ASSESSMENT IN GEOGRAPHY -GUIDELINES FOR MARKING WITH GRADES

Criteria	Preparation	Procedure/ Testing	Observation	Inference/Results	Presentation
Grade I (4 marks)	Gives complete theoretical information using relevant geographical terms	States the objectives and defines the aspects to be studied.	Studies text and source material and makes a list.	States theoretical information in a coherent and concise manner using geographical terminology. Uses a variety of techniques. Shows resourcefulness. Supports investigation with relevant evidence.	Neatly and correctly stated statement of intent and conclusion matches with objectives.
Grade II (3 marks)	Provides adequate information using appropriate terms.	States objectives but not the limitations of the study.	Makes a limited list of source material only from secondary sources.	Uses sound methodology-using methods suggested. Makes a valid statement about the data collected. Attempts to develop explanations using available information.	Limited use of reference material and a presentation, which is routine.
Grade III (2 marks)	States objectives using some geographical terms but mostly in descriptive terms.	Only lists the aspects to be studied.	References are minimal.	Uses methodology in which selective techniques are applied correctly. Makes descriptive statement. Analysis is limited. Relates and describes systematically the data collected. Tries to relate conclusion to original aim.	Simple and neat with correct placement of references, acknowledgements, contents, maps and diagrams.
Grade IV (1 mark)	States intent without using relevant geographical terms but explaining them correctly.	Shows evidence of what to look for and how to record the same.	Uses methodology with some techniques but is unable to systematically record data and collect information.	Makes few relevant statements. Does analyze data that is not presented or tends to copy analysis available from other sources. Makes superficial conclusions. Link between the original aim and conclusion is not clear.	Neat but lacking in correct placement of table of contents, maps, diagrams and pictures.
Grade V (0 marks)	Does not make any use of geographical terms.	Has not collected any relevant data and has not presented sources correctly.	Does not use any logical technique and does not follow the methodology suggested.	Does not analyze data. Does not use the suggested methods. Makes conclusions but does not relate them to the original aim.	Presents the report without reference.